

REMARKS

The Office Action dated October 16, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

In accordance with the foregoing, claims 1, 6, 22, and 25 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter is being presented, and approval and entry are respectfully requested. As will be discussed below, it is also requested that all of claims 1-26 be found allowable as reciting patentable subject matter.

Claims 1-26 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 101:

Claims 25 and 26 were rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter. This rejection is respectfully traversed as follows.

Applicant respectfully submits that, at least, "computer-readable medium" is considered to be statutory under the requirements set forth in MPEP § 2106.01 (II). In particular, MPEP § 2106.01(II) states:

a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Claims 25 and 26, for example, recite “A computer program, embodied on a computer-readable medium, the computer program configured to control a processor ...” Claims 25 and 26 satisfy the requirements set forth in the MPEP, because a “computer program, embodied on a computer-readable medium ...”, and “the computer program configured to control a processor...” as recited in claims 25 and 26, define structural and functional interrelationships between the instructions and the computer program and hardware components which permit the functions (e.g., the updating) to be realized.

Therefore, Applicants respectfully submit that the subject matter disclosed in claims 25 and 26 are statutory for at least the reasons stated above. Accordingly, withdrawal of the rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103:

Claims 1-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,970,476 of Jonsson et al. (Jonsson) in view of U.S. Patent Publication No. 2003/00122788 of Banerji et al. (Banerji). The Office Action took the position that Jonsson discloses all of the elements of the claims, with the exception of “wherein said compression history and first and second algorithm for determining whether a packet shall be compressed” (Office Action, page 4). Applicant notes that this limitation, as quoted by the Office Action, is not contained in the claims. Accordingly, as will be discussed in more detail below, Applicant submits that the Office Action is not correctly considering the claim limitations in their entirety. The features of claim 1 have been

slightly amended to further clarify the features being recited. In any case, the rejection is respectfully for at least the following reasons.

Claim 1, upon which claims 2-5 are dependent, recites a method that includes selectively updating a compression history at a compressor based on a first algorithm configured to determine whether a packet is to be compressed. The selectively updating of the compression history at the compressor is also based on a second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history.

Claim 6, upon which claims 7-10 are dependent, recites a method that includes using a first algorithm in conjunction with a compressing device to decide if a current packet should be compressed. The method also includes using a second algorithm in conjunction with the compressing device to decide which packets out of packets sent compressed are to be used to update a buffer of the compressing device. The method additionally includes signaling from the compressing device to a decompressing device such that the decompressing device knows which of the packets out of the packets sent are to be included in a compression history.

Claim 11, upon which claims 12-14 are dependent, recites an apparatus that includes a processor configured to update a compression history selectively, the processor having implemented and being configured to process a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history.

Claim 15, upon which claims 16-18 are dependent, recites an apparatus that includes a transmitter configured to signal to a decompression device which of a first set of packets are to be included in a compression history, the transmitter having implemented and processing a first algorithm used to decide if the current packet should be compressed. The apparatus also includes processing means for having a processor configured to have implemented and processing a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update a buffer, wherein the processor is operably connected to the signaling unit.

Claim 19, upon which claims 20 and 21 are dependent, recites an apparatus that includes a receiver configured to receive signals from a compression device indicating which packets are to be included in a compression history. The apparatus additionally includes a processor configured to process a packet sequence number for updating the buffer means in synchronization with the compression device, wherein the processing means is operably connected to the receiving means.

Claim 22 recites an apparatus comprising updating means for updating a compression history selectively, the updating means for implementing and processing a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history. Monitoring means is operably connected to the updating means for monitoring an acknowledgment signaling

Claim 23 recites an apparatus comprising signaling means for signaling a decompression device which of a first set of packets are to be included in the compression history, the signaling means having implemented and processing a first algorithm used to decide if the current packet should be compressed. The apparatus further includes processing means for having implementing and processing a second algorithm. The second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update the buffer, and the processor is operably connected to the means for signaling.

Claim 24 recites an apparatus comprising receiving means for receiving signals from a compression device indicating which packets are to be included in a compression history, and processing means for processing a packet sequence number for updating the buffer in synchronization with the compression device. The processor is operably connected to the receiving means.

Claim 25 recites a computer program, embodied on a computer-readable medium, the computer program configured to control a processor to perform a method. The method includes selectively updating a compression history at a compressor based on a first algorithm configured to determine whether a packet is to be compressed, and based on a second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history.

Claim 26 recites a computer program, embodied on a computer-readable medium, the computer program configured to control a processor to perform a method. The

method includes using a first algorithm in conjunction with a compressing device to decide if a current packet should be compressed, using a second algorithm in conjunction with the compressing device to decide which packets out of packets sent compressed are to be used to update a buffer of the compressing device, and signaling from the compressing device to a decompressing device such that the decompressing device knows which of the packets out of the packets sent are to be included in a compression history.

As will be discussed below, Applicant respectfully submits that Jonsson and Banerji fail to disclose or suggest all of the elements of the presently pending claims.

Jonsson discloses that, in packet communications that utilize header compression/decompression, relatively fast and reliable header compression context updates can be accomplished with relatively low overhead by sending anticipatory context update requests before decompressor context invalidation is detected, sending redundant context update requests, and sending redundant context updates. Transmission parameters associated with both context update requests and context updates can be controlled appropriately to improve their chances for delivery, and needless context update requests can be identified and ignored at the header compression side.

Banerji generally discloses a system and method for compressing video that video frames that between consecutive I-frames are grouped into a video data set. The video data set is split into separate homogeneous files, and each of the homogeneous files are

individually compressed. The individually compressed files are multiplexed to form a bit stream.

Applicant respectfully submits that Jonsson and Banerji, whether viewed individually or combined, fail to disclose or suggest all of the elements of the present claims. Jonsson merely discloses that the context control information that includes a context update request, further comprising receiving the context update request at the second packet communication station, determining whether a context update corresponding to the received context update request has already been sent from the second packet communication station to the first packet communication station, and ignoring the received context update request if a corresponding context update has already been sent from the second packet communication station to the first packet communication station. See column 11, lines 10-19. Jonsson does not provide any disclosure of selectively updating a compression history or determining whether a compressed packet is to be used for the updating of the compression history.

The Office Action correctly recognized that Jonsson fails to teach or suggest, “selectively updating a compression history at a compressor *based on a first algorithm configured to determine whether a packet is to be compressed, and based on a second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history,*” emphasis added, as recited in claim 1 and similarly recited in claims 11, 22, and 25; and “using a second algorithm in conjunction with the compressing device to decide which packets out of packets sent compressed are to be

used to update a buffer of the compressing device,” as recited in claim 6 and similarly recited in claim 26. Accordingly, the Office Action relied upon the description of Banerji as curing the deficiencies of Jonsson. However, contrary to the contentions made in the Office Action, Applicant respectfully submits that Banerji does not cure the deficiencies of Jonsson.

Banerji describes that motion data information of each I-frame distance set is split into a set of homogenous files, based on whether the component represents horizontal or vertical motion, whether the frame is P- or B-type, and so on. See paragraph [0010] An additional file is formed that stores the motion compensation modes. These files are then individually compressed using a suitable lossless data compression algorithm that can exploit data history from the beginning of each file. However, Banerji does not teach or suggest that *a determination is performed* using a first algorithm to determine whether a packet is to be compressed. Rather, files are individually compressed. Banerji does not perform a determination using the lossless data compression algorithm and does not compress a packet. Instead, Banerji simply compresses a file.

Furthermore, contrary to the contentions made in the Office Action, Banerji does not cure the deficiencies of Jonsson because Banerji also fails to teach or suggest, at least, “selectively updating a compression history at a compressor based on a first algorithm configured to determine whether a packet is to be compressed, and based on a second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history,” as recited in independent claim 1 and similarly

recited in claims 11, 22, and 25. Banerji does not teach or suggest that a compression history is selectively updated based on a first algorithm *and* based on a second algorithm. Banerji simply provides that quantized transform coefficient data are split into a set of files corresponding to different bit-planes of the quantized transform coefficient data, and an additional file is formed that provides information about the number of bit-planes for each block in a frame. See paragraph [0011] Banerji does not teach or suggest that the compression history is selectively updated using two algorithms, the first algorithm configured to determine whether a packet is to be compressed and the second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history. Instead, Banerji generally provides that *bit-plane files* are compressed using run-length encoding. (Emphasis added) *The run-length encoded files and the additional file* are individually coded using a suitable lossless data compression algorithm that can exploit data history from the beginning of each file. Neither the run-length encoding nor the lossless data compression algorithm is configured to determine whether a packet is to be compressed nor configured to determine whether a compressed packet is to be used for the updating of the compression history. The lossless data compression algorithm does not determine whether a compressed packet is to be used for the updating of the compression history as recited in independent claim 1 and similarly recited in claims 11, 22, and 25.

Banerji is only directed to the separation and compression of motion data. Indeed, Banerji merely describes that the files are compressed using a suitable lossless data

compression algorithm that can exploit data history from the beginning of each file. Banerji does not selectively update a compression history at a compressor based on a first algorithm configured to determine whether a packet is to be compressed, and based on a second algorithm configured to determine whether a compressed packet is to be used for the updating of the compression history.

Other portions of the description of Jonsson and Banerji are also devoid of any teaching or suggestion providing the claimed features of the present invention.

Similarly, the combination of Jonsson and Banerji fails to disclose or suggest “a processor configured to have implemented and to process a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update a buffer, wherein the processor is operably connected to the transmitter,” as recited in claim 15 and similarly recited in claim 23. The combination of Jonsson and Banerji further fails to disclose or suggest “a receiver configured to receive signals from a compression device indicating which packets are to be included in a compression history; and a processor configured to process a packet sequence number for updating a buffer in synchronization with the compression device, wherein the processor is operably connected to the receiver,” as recited in claim 19 and similarly recited in claim 24.

Therefore, Applicants respectfully submit that the combination of Jonsson and Banerji fails to disclose or suggest all of the features of claims 1, 6, 11, 15, 19, and 22-26.

Accordingly, Applicants respectfully request that the rejection of these claims be withdrawn.

Claims 2-5, 7-10, 12-14, 16-18, and 20-21 are dependent upon claims 1, 6, 11, 15, and 19. Thus, claims 2-5, 7-10, 12-14, 16-18, and 20-21 should be allowed for at least their dependence upon claims 1, 6, 11, 15, and 19, and for the specific limitations recited therein.

CONCLUSION:

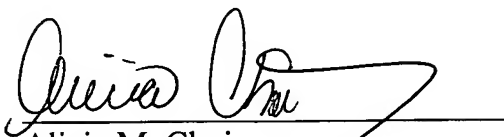
In view of the above, Applicant respectfully submits that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant further submits that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicant therefore respectfully requests that each of claims 1-26 be found allowable and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Alicia M. Choi', is written over a horizontal line.

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